

REMARKS

Claims 28-44 stand rejected under 35 U.S.C. §102(b) as being anticipated by Toshida (U.S. Patent No. 5,812,227). Applicants respectfully the rejection because Toshida fails to disclose (or suggest) an alignment assisting material for vertically aligning liquid crystal molecules, as recited in independent claim 28, or a step of curing an alignment assisting material at an interface of the substrates to align the liquid crystal molecules vertically, as recited in independent claim 41.

Toshida discloses a display layer 103 comprising a low-molecular weight mesomorphic compound 105 and a porous polymer material 104 (see FIG. 1, col. 4, lines 28-34). Toshida also discloses a display layer comprising a low-molecular weight mesomorphic compound 106 and a three-dimensional network structure 104 (see FIG. 2 and col. 18, line 66 to col. 19, line 9). However, Toshida fails to disclose (or suggest) that the porous polymer material 104 aligns the low-molecular weight mesomorphic compound 105 vertically, or that the three-dimensional network structure 104 aligns the low-molecular weight mesomorphic compound 106 vertically. Therefore, Toshida fails to disclose or suggest the features of claims 28 and 41 of the present Application.

In contrast, the present invention advantageously omits the step forming vertical alignment films and a vertical alignment type liquid crystal display. Accordingly, the present invention has a feature in claim 28 of having an alignment assisting material for vertically aligning liquid crystal molecules. Claim 41 recites a step of curing the alignment assisting material on an interface of the substrates to align the

liquid crystal molecules vertically. Toshiba, however, relates to a polymer dispersed-type liquid crystal display. Toshiba fails to disclose or suggest the feature of a vertical alignment in a constitution of a display device. For this reason, withdrawal of the §102(b) rejection of claims 28-44 is respectfully requested.

New claims 50-51 are added and recite that the alignment assisting material is formed at an interface of the substrates. Advantageously, this feature results in an improves of a voltage holding ratio of the liquid crystal display in which alignment control layers are formed from a polymerizable compound at an interface of the substrates (see FIG. 18 and the related description of the present Application). Applicants earnestly solicit allowance of new claims 50-51 based on the features recited in these claims and also for the reasons recited above with respect to the rejection of independent claims 28 and 41.

For all of the foregoing reasons, Applicants submit that this Application is in condition for allowance, which is respectfully requested. The Examiner is invited to contact the undersigned attorney if an interview would expedite prosecution.

Respectfully submitted,

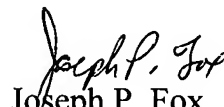
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